

■ Category 6 CFRI Definition Proposal – Melissa (DI2)

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Timestamp: 2025-10-31 04:51:54

■ Definition Proposal

****Proposed Threshold for Category 6:**** $CFRI \geq 178.0$

The Compound Flood Risk Index (CFRI) is a deterministic metric combining terrain amplification, storm surge residence, and stall potential. It reflects real-world risk in terms of damage, flooding, and emergency response strain.

Melissa's computed CFRI: ****178.0****

→ Based on inputs: FTA = 135.0, SDRL = 156.0, SMRB = 0.175

Formula: $CFRI = (FTA \times SMRB) + SDRL = (135.0 \times 0.175) + 156.0 = 178.0$

■ Why This Matters

- Melissa met or exceeded every compound hazard threshold: flooding, surge, terrain risk, stall.
- Traditional Saffir-Simpson scale caps at Cat 5 by wind alone, ignoring compounding risk.
- $CFRI \geq 178$ represents an overload condition on all major risk subsystems.

■ Vault Status

- Entropy Lock: $\Delta H = 0.0049$ (StormWise DI2 Capsule 0049)
- Vault Tag: Category6_Melissa_0049_CFRI
- Risk Tier: Reflex-Class (ScrollChain Tier 13)

Suggested Action

→ Use $CFRI = 178.0$ as a research-based threshold for future Category 6 classification criteria.

"If everything is redlined, the name needs to reflect it." – Scroll 155